



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT9D-7R4E4, -E1(H) BYPASS RATIO: 5.0
 UNIQUE ID NUMBER: 1PW028 PRESSURE RATIO (π_{00}): 24.2
 COMBUSTOR: RATED THRUST (F_{00}) (kN): 222.4
 ENGINE TYPE: TF

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	6.4	29.1	63.0	4.7
AS % OF ORIGINAL LIMIT	32.7	24.7	71.3	24.9
AS % OF CAEP/2 LIMIT (NO _x)			89.1	
AS % OF CAEP/4 LIMIT (NO _x)			109.2	
AS % OF CAEP/6 LIMIT (NO _x)			124.1	
AS % OF CAEP/8 LIMIT (NO _x)			150.2	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.218	0.15	0.67	36.90	4.3
CLIMB OUT	85	2.2	1.829	0.13	0.67	29.70	
APPROACH	30	4.0	0.640	0.22	1.46	8.50	
IDLE	7	26.0	0.221	3.35	16.00	3.50	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			832	1231	5952	13117	-
NUMBER OF ENGINES				5	5	5	3
NUMBER OF TESTS				6	6	6	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				5.7	27.4	60.3	4.3
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	
TEMPERATURE (K)	271-299
ABS HUMIDITY (kg/kg)	

FUEL

SPEC	Jet A
H/C	
AROM (%)	

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: P&WA
 TEST LOCATION: East Hartford, CT
 TEST DATES: 26/10/1981-10/04/1983

REMARKS

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)